SANTA CRUZ BIOTECHNOLOGY, INC.

Laminin β-2 (H-1): sc-133241

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The laminins comprise a growing family of disulfide-linked heterotrimers consisting of three genetically distinct polypeptide chains, designated α, β and γ. A major component of the basal lamina, laminins play a crucial role in providing a scaffolding upon which tissues are assembled and which serves as a physical barrier separating specialized tissues. During embryogenesis and early development, cells migrate along basement membranes, which are required for the polarization of cells. The β-2 Laminin chain plays a role in melanoma spread, promoting tumor migration along the abluminal surface of a vessel, a phenomenon which has been termed extra-vascular migratory metastasis.

REFERENCES

1. Yurchenco, P.D. and O'Rear, J.J. 1994. Basal lamina assembly. Curr. Opin. Cell Biol. 6: 674-681.
2. Engvall, E. 1995. Structure and function of basement membranes. Int. J. Dev. Biol. 39: 781-787.
3. Aumailley, M. and Krieg, T. 1996. Laminins: a family of diverse multifunctional molecules of basement membranes. J. Invest. Dermatol. 106: 209-214.

CHROMOSOMAL LOCATION

Genetic locus: LAMB2 (human) mapping to 3p21.31.

SOURCE

Laminin β-2 (H-1) is a mouse monoclonal antibody raised against amino acids 1549-1798 mapping at the C-terminus of Laminin β-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Laminin β-2 (H-1) is recommended for detection of Laminin β-2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Laminin β-2 siRNA (h): sc-35784, Laminin β-2 shRNA Plasmid (h): sc-35784-SH and Laminin β-2 shRNA (h) Lentiviral Particles: sc-35784-V.

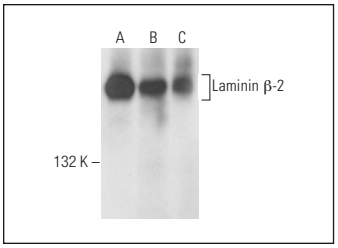
Molecular Weight of Laminin β-2: 200 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HT-1080 whole cell lysate: sc-364183 or LNCaP cell lysate: sc-2231.

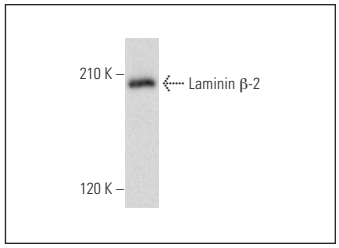
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Laminin β-2 (H-1): sc-133241. Western blot analysis of Laminin β-2 expression in HeLa (**A**), LNCaP (**B**) and HT-1080 (**C**) whole cell lysates.



Laminin β-2 (H-1): sc-133241. Western blot analysis of Laminin β-2 expression in human ovary tissue extract.

SELECT PRODUCT CITATIONS

1. Wang, F., et al. 2015. Proteomic analysis of mouse soleus muscles affected by hindlimb unloading and reloading. Muscle Nerve 52: 803-811.
2. Wang, F., et al. 2017. Serum miRNAs miR-23a, 206, and 499 as potential biomarkers for skeletal muscle atrophy. Biomed Res. Int. 2017: 8361237.
3. Jin, D., et al. 2018. Norcantharidin reverses cisplatin resistance and inhibits the epithelial mesenchymal transition of human non-small lung cancer cells by regulating the YAP pathway. Oncol. Rep. 40: 609-620.
4. Yan, Y., et al. 2018. Laminins in an *in vitro* anterior lens capsule model established using HLE B-3 cells. Mol. Med. Rep. 17: 5726-5733.
5. Beaufils, C., et al. 2018. Skeletal impairment in Pierson syndrome: is there a role for Laminin β-2 in bone physiology? Bone 106: 187-193.
6. Wei, X., et al. 2019. Kojic acid inhibits senescence of human corneal endothelial cells via NFκB and p21 signaling pathways. Exp. Eye Res. 180: 174-183.
7. Yan, Y., et al. 2019. Laminin α4 overexpression in the anterior lens capsule may contribute to the senescence of human lens epithelial cells in age-related cataract. Aging 11: 2699-2723.
8. Khan, A.Z., et al. 2020. Sericin-induced melanogenesis in cultured retinal pigment epithelial cells is associated with elevated levels of hydrogen peroxide and inflammatory proteins. Molecules 25: 4395.

RESEARCH USE

For research use only, not for use in diagnostic procedures.